Amendments to the claims (this listing replaces all prior versions):

1. (currently amended) A machine-based method comprising:

receiving data representing current prices of options on a given asset,

by machine, performing computations to derive ~~deriving~~ from said data an estimate of a corresponding implied probability distribution of the price of said asset at a future time, and

making information about said probability distribution available within a time frame that is useful to investors.

2. (original) The method of claim 1 in which the data represent a finite number of prices of options at spaced-apart strike prices of the asset, and also including

calculating a set of first differences of said finite number of prices to form an estimate of the cumulative probability distribution of the price of said asset at a future time.

3. (original) The method of claim 2 also including

calculating a set of second differences of the finite number of strike prices from the set of first differences to form an estimate of the probability distribution function of the price of said asset at a future time.

4. (canceled)

5. (canceled)

6. (canceled)

7. (canceled)

8. (currently amended) A machine-based method comprising:

receiving data representing current prices of options on a given asset, the options being associated with spaced-apart strike prices of the asset at a future time,

the data including shifted current prices of options resulting from a shifted underlying price of the asset, the amount by which the asset price has shifted being different from the amount by which the strike prices are spaced apart, and

by machine, performing computations to derive ~~deriving~~ from said data an estimate of a quantized implied probability distribution of the price of said asset at a future time, the elements

of the quantized probability distribution being more finely spaced than for a probability distribution derived without the shifted current price data.

9. (currently amended) A machine-based method comprising

receiving data representing current prices of options on a given asset, the options being associated with spaced-apart strike prices of the asset at a future time,

by machine, performing computations to derive ~~deriving~~ from said data an estimate of an implied probability distribution of the price of said asset at a future time, the mathematical derivation including a smoothing operation, and

making information about said probability distribution available within a time frame that is useful to investors.

10. (original) The method of claim 9 in which the smoothing operation is performed in a volatility domain.

11. (original) The method of claim 9 in which the smoothing operation is performed in the domain of the option prices or in the domain of the probability distribution information.

12. (canceled)

13. (canceled)

14. (canceled)

15. (canceled)

16. (canceled)

17. (canceled)

18. (canceled)

19. (canceled)

20. (canceled)

21. (canceled)

22. (canceled)

23. (canceled)

24. (canceled)

25. (canceled)

26. (canceled)

27. (currently amended) A machine-based method comprising

defining a current value of an option as a quadratic expression that depends on the difference between the current price of the option and the current price of the underlying security, and

by machine, performing computations that use ~~using~~ Monte Carlo techniques to estimate a probability distribution of the value at a future time T of a portfolio that includes the option.